(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 1 September 2005 (01.09.2005)

PCT

(10) International Publication Number WO 2005/080858 A1

(51) International Patent Classification7: F17C 13/00, 3/08

(21) International Application Number:

PCT/GB2005/000563

(22) International Filing Date: 16 February 2005 (16.02.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(**30**) **Priority Data:** 0403377.5

16 February 2004 (16.02.2004) GB

(71) Applicant (for all designated States except US): AB-ERDEEN UNIVERSITY [GB/GB]; Research and Innovation, University Office, Kings College, Aberdeen AB24 3FX (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SETON, Hugh,

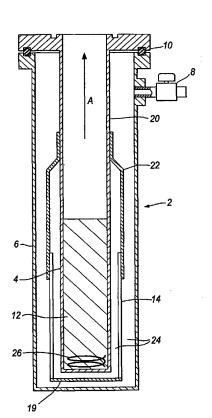
Charles [GB/GB]; 22 Richnond Court, Aberdeen AB25 2WE (GB). HUTCHISON, James, MacDonald, Strachan [GB/GB]; 29 Lawsondale Drive, Westhill, Aberdeen AB32 6TU (GB). BUSSELL, David, Malcolm [GB/GB]; 10 Park Avenue, Bath BA2 4QD (GB).

(74) Agents: ABLETT, Graham, Keith et al.; Ablett & Stebbing, Caparo House, 101-103 Baker Street, London W1U 6FQ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: LIQUIFIED GAS CRYOSTAT



(57) Abstract: The present invention relates to a liquified gas cryostat which comprises inner and outer walls defining an evacuated housing; a multilayer insulation positioned between the inner and outer walls; and at least one radiation shield circumscribing the inner wall between the inner and outer walls so as to extend over an area of the inner wall which is contacted and cooled by liquified gas in the cryostat when in use, wherein the radiation shield comprises a plurality of rods which are thermally conducting and electrically insulating when the cryostat contains liquified gas.

WO 2005/080858 A1



(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— with international search report